

Amendments to the Specification:

On Page 1, please replace the first full paragraph with the following rewritten paragraph:

The invention relates to a method for balancing rotors without journals ~~according to the preamble of claim 1~~ and to a bearing arrangement with a bearing mandrel for holding a rotor, without journals but having a bore, in a balancing device ~~according to the preamble of claim 7~~.

On Page 1, please replace the third full paragraph with the following rewritten paragraph:

From EP 0 104 266 A1 a method is known, with which rotors without journals can be balanced without an auxiliary shaft with high balancing quality. For this, the rotor is mounted on a bearing mandrel of a balancing machine and bearing fluid is brought between faces of rotors and bearing mandrels located opposite one another. Errors caused by surface inaccuracies no longer appear, as differences in shape of the rotor bore or of the bearing mandrel are ~~integrated~~ compensated and a stable axis of rotation of the rotor is provided. In the axial direction the rotor is supported by an annular face on an annular support face of the bearing mandrel. In the event of axial run-out errors, for example, this may lead to less accurate measuring results.

On Page 1, please replace the fifth full paragraph with the

following rewritten paragraph:

According to the invention this object is achieved ~~with the~~
~~features of claims 1 and 7~~ in one aspect by a method for
balancing rotors without journals, in which the rotor, which has
a bore, is arranged on a bearing mandrel of a balancing device
and fluid is brought between rotor and bearing mandrel faces
located opposite one another and the rotor is set into rotation,
wherein oscillations of the bearing mandrel induced by imbalance
are drawn on to determine the imbalance, and wherein the rotor is
supported in a first bearing region in the radial direction by
means of a liquid and in the bearing arrangement of a rotor which
has a pocket hole bore it is supported in a second bearing region
in a presettable axial position on the bearing mandrel by
supplying fluid to a fluid chamber positioned between the end of
the pocket hole bore and the end of the bearing mandrel. In
another aspect, this object is achieved by a bearing arrangement
with a bearing mandrel for holding a rotor, without journals but
having a bore, in a balancing device in at least one first and
one second bearing region, the bearing mandrel having orifices

for the passage of fluid, wherein first orifices for fluid supply
and at least one second orifice for fluid discharge are provided
in the bearing mandrel, when holding a rotor having a pocket hole
bore the bearing arrangement has a fluid chamber constructed
between the end of the pocket hole bore and the end of the
bearing mandrel, which has at least one inlet and one outlet
channel and the bearing mandrel has at least the outlet channel.